

AMENDMENTS TO THE CLAIMS

Please replace the claims, including all prior versions, with the listing of claims below.

1. (Currently Amended) ~~Method~~ A method for regenerating a particulate filter, which is mounted in an exhaust gas channel of an internal combustion engine, filters particles out of exhaust gas flowing inside of the exhaust gas channel and is intermittently regenerated during operation, ~~characterized in that~~ comprising:

measuring ~~the~~ actual air mass flow supplied to the internal combustion engine ~~is measured;~~
determining ~~the~~ an air requirement of the internal combustion engine to be expected at a current operating point ~~is determined;~~ and

a regeneration of the particulate filter is initiated based on a difference between the air mass flow and the air requirement.

2. (Currently Amended) ~~Method~~ The method according to Claim 1, characterized in that wherein the regeneration is triggered if ~~the~~ a difference of the actual air mass flow from the calculated air requirement exceeds a predetermined threshold value.

3. (Currently Amended) ~~Method~~ The method according to ~~one of the above claims,~~ ~~characterized in that~~ Claim 1, wherein the air requirement is determined taking an empty or cleaned particulate filter as starting point.

4. (Currently Amended) ~~Method~~ The method for regenerating a particulate filter, which is mounted in ~~the~~ an exhaust gas channel of an internal combustion engine, filters particles out of the exhaust gas flowing inside of the exhaust gas channel and is intermittently regenerated during operation, ~~characterized in that~~ the comprising:

measuring actual air mass flow supplied to the internal combustion engine ~~is measured;~~

adapting a model for determining ~~the~~ an air requirement to be expected at ~~the~~ a current

operating point is adapted to the actual air mass flow; and a

regeneration of the particulate filter is initiated if the model lies outside the a predetermined parameter ranges after the adaptation.

5. (Currently Amended) ~~Method~~ The method according to ~~one of the above claims,~~
~~characterized in that Claim 4, wherein~~ the model is adapted to the actual air mass flow, whereby
at least one adjustment value is suitably set and a regeneration is triggered if the adjustment value is
outside the predetermined ranges.

6. (Currently Amended) ~~Method~~ The method according to ~~one of the above claims,~~
~~characterized in that Claim 4, wherein~~ in the determination of the air requirement, other
variables influencing the air requirement than the accumulation of particles in the particulate filter
are taken into consideration, in particular, ~~the ambient pressure and component tolerances.~~

7. (Currently Amended) ~~Method~~ The method according to ~~one of the above claims,~~
~~characterized in that Claim 4, wherein~~ the determination of the air requirement and the a
decision as to whether a regeneration is triggered ~~only~~ occur at discrete operating points of the
internal combustion engine.

8. (Currently Amended) ~~Method~~ The method according to ~~one of the above claims,~~
~~characterized in that Claim 4, wherein~~ the air requirement is calculated for the control of the
internal combustion engine, whereby a partly loaded filter is taken as the a starting point.

9. (Currently Amended) ~~Method~~ The method according to ~~one of the above claims,~~
~~characterized in that Claim 4, wherein~~ the actual air mass flow supplied to the internal
combustion engine is determined by an air mass measuring device mounted in an intake tract of the
internal combustion engine, or by a pressure sensor mounted in the intake tract of the internal
combustion engine.